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# Philip Hurst & Maria Kavussanu

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# Authentic leadership and well-being in sport: the mediating role of psychological safety and the moderating role of interpersonal violence

Philip Hurst (10 a and Maria Kayussanu (10 b

<sup>a</sup>School of Psychology & Life Sciences, Canterbury Christ Church University, Canterbury, UK; <sup>b</sup>School of Sport, Exercise and Rehabilitation Sciences, The University of Birmingham, Birmingham, UK

#### **ABSTRACT**

Sport leaders, such as coaches, are critical in promoting psychological safety with subsequent effects on athlete wellbeing. However, many athletes experience interpersonal violence (e.g., psychological abuse), which can negatively influence their well-being and may attenuate the beneficial effects of positive coaching styles such as authentic leadership. Understanding the relationship between authentic leadership, psychological safety and athlete well-being after experiencing interpersonal violence in sport is important in designing effective safeguarding interventions and policy. In this study, we were the first to examine the indirect relationship between authentic leadership and well-being via psychological safety, and if the direct relationship between authentic leadership and well-being is moderated by interpersonal violence. Competitive athletes (N =305; 52% female,  $29.20 \pm 12.62$  years old) completed an anonymous questionnaire measuring authentic leadership of their current coach, psychological safety, interpersonal violence, and well-being. Authentic leadership was indirectly related to athletes' well-being via psychological safety (effect size = 0.13, 95% CI = 0.07, 0.19), and the direct effect of authentic leadership on athletes' well-being was significant only when interpersonal violence scores were low or moderate. These findings suggest that when athletes perceive their coaches to be authentic leaders, they are more likely to feel psychologically safe, and in turn have a greater sense of well-being. However, authentic leaders are less likely to positively influence well-being when athletes have experienced interpersonal violence. A need exists to prevent interpersonal violence so that coaches displaying authentic leadership qualities can positively influence their athletes' wellbeing.

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CONTACT Philip Hurst D philip.hurst@canterbury.ac.uk D School of Psychology & Life Sciences, Canterbury Christ Church University, North Holmes Road, Canterbury CT1 1XH, UK @phil\_hurst1

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Sport is characterised by power differentials, whereby leaders, such as coaches, managers, and directors, have power over athletes. Leaders that focus too much on the pursuit of high-performance goals can compromise athlete health and well-being (Sauvé et al., 2023; Walton et al., 2024). Coaches adopting such an approach can lead athletes to refrain from speaking up about concerns for their well-being (Rice et al., 2016, 2022; Walton et al., 2024), which in turn could result in poor mental health (e.g., depression, anxiety) and maladaptive behaviours (e.g., disorder eating, self-harm). As such, it is critical that the leadership style coaches adopt help athletes feel safe. Recently, UK Sport adapted their welfare policies to help improve the well-being for those in sport and identify how coaches can better support their athletes (UK Sport, 2023). This is in light of the Whyte Review (Whyte, 2022), which highlighted an "unacceptable culture" and "failure" to protect athlete welfare in British gymnastics. Similar high-profile cases of abusive practices in UK sport organisations are reported elsewhere, including British Athletics (The Guardian, 2022), British Swimming (BBC, 2023) and Welsh Rugby Union (The Conversation, 2022), which further underscore the change needed to help better protect athlete well-being. Given this, in our study, we examined the relationship between a valuesbased leadership style, namely authentic leadership, and athlete well-being on a sample of UK athletes, and examined whether psychological safety mediates, and experiences of interpersonal violence moderate, this relationship.

# Authentic leadership and well-Being

There are various perspectives on well-being. From a eudaimonic perspective, well-being represents purpose in life, personal growth, self-acceptance, positive relationships, mastery, and autonomy (Ryff & Keyes, 1995; Ryff & Singer, 2008). Well-being is influenced by several psychological and social factors, which are important for growth and development, personal fulfilment, needs satisfaction, and realising one's potential (Lundqvist, 2011; Martela & Sheldon, 2019). An indicator of eudaimonic well-being is subjective vitality, which refers to a person displaying enthusiasm for life (Ryan & Frederick, 1997). People who experience high subjective vitality display better physical health, self-actualisation and life satisfaction (Lavrusheva, 2020; Ryan & Frederick, 1997) and are less likely to experience depression, anxiety, and psychological distress (Arslan et al., 2022; Lavrusheva, 2020; Niemiec et al., 2010).

Leadership in sport is recognised as an important factor for promoting athlete wellbeing (Back et al., 2022; Jowett et al., 2023; Poczwardowski et al., 2006; Vella et al., 2013) and several leadership styles have shown to be related to well-being, such as transformational (Stenling & Tafvelin, 2014), ethical (Yukhymenko-Lescroart et al., 2015) and identity (Fransen et al., 2022) leadership. In this study, we focus on authentic leadership, which has been defined by Walumbwa et al. (2008) as

a pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalised moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development. (p. 94)

Authentic leadership consists of four components (Walumbwa et al., 2008): (1) self-awareness, which refers to showing an understanding of one's strengths and weaknesses and being aware of one's impact on others, (2) relational transparency, which pertains to authentic leaders showing their true self to others, and expressing their true thoughts and feelings, while minimising the expression of inappropriate emotions, (3) balanced processing, which involves considering and objectively analysing all relevant information, including followers' perspectives, before making a decision, and (4) internalised moral perspective, whereby authentic leaders are guided in their behaviour by their internal moral standards.

Authentic leaders are likely to have a positive influence on athlete well-being. Authentic leadership is underpinned by transparency, ethical values, self-awareness, honesty, and consistency in decision-making (Walumbwa et al., 2008) and those who display such characteristics are more likely to foster health and goal achievement (Avolio & Gardner, 2005; Malloy & Kavussanu, 2021; Walumbwa et al., 2008). Importantly, authentic leaders act in ways that are consistent with their moral values and are more likely to create trusting and safe spaces that could promote athlete well-being (c.f. Walumbwa et al., 2008). Empirical evidence supporting the relationship between authentic leadership and various indices of well-being in sport has started to emerge. For example, Kim et al. (2020) showed that authentic leadership was positively related with psychological well-being, while others reported positive links with enjoyment, commitment (Bandura & Kavussanu, 2018; Malloy & Kavussanu, 2021) and mental well-being (Kavussanu et al., 2024). In short, emerging evidence indicates that authentic leaders are likely to positively influence athlete well-being.

# The mediating role of psychological safety

As well as examining the relationship between authentic leadership and well-being, it is important to investigate the mechanism through which this relationship operates. A variable that may explain this relationship is psychological safety, which refers to a person's belief that they are safe from risk or harm (Edmondson & Lei, 2014) and has emerged as an important variable that could promote athlete well-being (Vella et al., 2024; Walton et al., 2024). Research into psychological safety originated from organisational and business contexts (Edmondson & Lei, 2014), and highlights that qualities evident in authentic leaders, such as emphasising support (Tu et al., 2019), integrity in decision making (Leroy et al., 2012; Palanski & Vogelgesang, 2011) and openness (Detert & Burris, 2007), are strongly and positively associated with employee psychological safety. In sport, studies have shown that athletes who report low psychological safety are more likely to have experienced burnout, low performance satisfaction, and high psychological distress (Fransen et al., 2020; Jowett et al., 2023), whereas those who report high psychological safety are more likely to flourish and report positive affect (Gosai et al., 2023). In short, psychological safety is likely to be related to authentic leadership and in turn improve athlete well-being.

In a systematic review of psychological safety in sport, Vella et al. (2024) proposed a theoretical model of the antecedents and consequences of it, with leadership style adopted by the coach as an important antecedent and athlete well-being as a consequence. The leadership qualities that were reported to increase psychological safety are evident in authentic leadership. That is, Vella et al. (2024) highlighted that coaches who are fair and ethical, and involve athletes in decision-making, are more likely to increase psychological safety. Although no study has examined the link between authentic leadership and psychological safety, Gosai et al. (2023) recently reported that athletes who received transformational leadership style coaching, which has some similarities to authentic leadership, and emphasises articulation in vision and individualised support (Arthur et al., 2017), were more likely to feel psychologically safe, and in turn, flourish. Flourishing is an indicator of eudaimonic well-being, where one lives life in accordance with values, meaning and purpose (Ryff & Singer, 2008). Thus, this study highlights that the leadership style a coach adopts has the potential to increase psychological safety and in turn, athlete well-being.

Collectively, theoretical and empirical evidence suggests that authentic leadership may promote both psychological safety and well-being in athletes. However, to date, no study has examined whether coaches who are perceived to be authentic leaders promote psychological safety in their athletes, and whether this in turn, corresponds to greater athlete well-being. A need exists, therefore, to determine whether authentic leadership is positively related to psychological safety, and if this in turn, is positively linked to athlete well-being.

# The moderating role of interpersonal violence

Interpersonal violence is any form of physical, or psychological ill treatment, sexual abuse, or neglect that results in actual or potential harm to health, development, or dignity, and can have severe negative effects on athlete well-being (Hurst et al., In press; Parent et al., 2022; Vertommen et al., 2018; Willson et al., 2023). Athletes may experience varying levels of interpersonal violence within sport (Kerr et al., 2019; Parent & Fortier, 2017; Vertommen et al., 2016) with notable examples highlighted in the media in the last decade (e.g., Larry Nassar, the Whyte Review, Hockey Canada). Research sampling European (Hartill et al., 2023; Vertommen et al., 2016), North American (Hartill et al., 2023; Vertommen et al., 2016; Willson et al., 2022) and Oceanic (Pankowiak et al., 2023) sport participants, indicates that between 38 and 75% of have experienced some form of interpersonal violence. Moreover, athletes who experience interpersonal violence are more likely to report higher levels of anxiety (Vertommen et al., 2018), psychological distress (Parent et al., 2022) and depression and show greater rates of eating disorders (Parent et al., 2022; Willson et al., 2023), symptoms of post-traumatic stress disorder (Parent et al., 2022) and self-harm (Willson et al., 2023). Thus, higher levels of interpersonal violence are likely to negatively affect athlete well-being.

Given the negative relationship between interpersonal violence and athlete mental health (Parent et al., 2022; Willson et al., 2023), such negative experiences may attenuate the potential beneficial effect of authentic leadership on athlete well-being. Even when a coach displays an authentic leadership style that promotes psychological safety and in turn, athlete well-being, if an athlete experiences interpersonal violence (e.g., psychological abuse, neglect, sexual harassment), the likelihood of authentic leadership promoting well-being may be thwarted. As interpersonal violence can occur in a number of situations within a sports club, such as at training (Park et al., 2025), in competition (Willson & Kerr, 2022) and during social events (Alexander, 2020), and from a number of people, including coaches (McMahon et al., 2022), other athletes (Fogel & Quinlan, 2021) and spectators (Cleland et al., 2024), these experiences could negate any potential benefit of authentic leadership on athlete well-being. Examining this is pressing, as several sport organisations have devoted and implemented interventions to educate coaches about promoting athlete well-being (IOC, 2024; The FA, 2024; WHO, 2024). The effects of these interventions may be negated if athletes experience interpersonal violence. Research is therefore needed to examine whether interpersonal violence experienced by athletes moderates the relationship between coaches' authentic leadership and athletes' well-being.

## The present research

Creating the conditions that promote the well-being of athletes is of critical importance to protect their mental health and prevent maladaptive behaviours. Authentic leadership can confer benefits to athlete well-being by influencing the degree to which athletes feel psychologically safe within their club. However, the potential benefits of authentic leadership on athlete well-being could be attenuated if athletes have experienced interpersonal violence within their sport. To date, no study has examined whether the relationship between authentic leadership and well-being is mediated by psychological safety and moderated by interpersonal violence. In our study, we had two research purposes: (1) to examine if the relationship between coaches' authentic leadership and athletes' well-being is mediated by psychological safety; and (2) to investigate if interpersonal violence moderates the direct effect of authentic leadership on athletes' well-being. The hypothesised model is depicted in Figure 1.

#### Materials and methods

The study is reported in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology checklist (Von Elm et al., 2014).

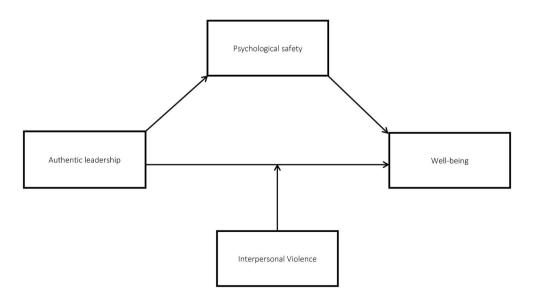


Figure 1. Proposed model of authentic leadership on well-being, via psychological safety, with interpersonal violence as a moderator.

# **Participants**

Three-hundred and five competitive athletes (mean  $\pm$  SD age = 29.20  $\pm$  12.62 years old; mean  $\pm$  SD years competing in sport = 13.51  $\pm$  10.71; hours per week training = 6.23  $\pm$  5.15) from the United Kingdom participated in the study. They identified as male (46.7%), female (52.0%) and non-binary (0.7%), with 0.7% preferring not to disclose their gender. They competed across 25 individual (20.9%) or team (79.1%) sports, with the most sampled being from soccer (22.2%), cricket (19.9%) and netball (12.9%), and competed at club (57.9%), regional (25.8%), national (11.3%) or international (5.0%) competitive level. Eligibility criteria stipulated participants had to be 16 years or older, registered to a sports club or team, and be part of a team that had a coach at the time of data collection. An  $\alpha$ -priori power analysis using G\*Power 3.1.9 (Faul et al., 2009), indicated that for a linear multiple regression with three predictors a sample size of 161 was needed, anticipating a medium effect size (Cohen's  $f^2$  = 0.15), power of 0.99, and  $\alpha$  of 0.05. Thus, our sample size exceeded these requirements.

#### Measures

# **Authentic leadership**

We used the Authentic Leadership Questionnaire (Walumbwa et al., 2008) to assess participants' perceptions of their coaches' authentic leadership. The questionnaire consists of 16 items and four subscales. Four items assessed self-awareness (e.g., "seeks feedback to improve interaction with others" and "shows he/she understands how specific actions impact others") and balanced processing (e.g., "solicits views that challenge his/her deeply held positions" and "analyses relevant data before coming to a decision"), five items assessed relational transparency (e.g., "encourages everyone to speak their mind" and "admits mistakes when they are made" and "tells you the truth") and three items assessed internalised moral perspective (e.g., "demonstrates beliefs that are consistent with actions" and "makes decisions based on his/her core values"). Participants were asked to think about their experiences with their current coach, consider how much each statement related to the leadership of their current coach, and respond on a Likert-type scale anchored by 0 (not at all) to 4 (frequently, if not always). Each subscale has shown good-to-very-good internal consistency (a range = .70 to .87) with athletic populations (Grégoire et al., 2021; Malloy & Kavussanu, 2021; Soto-García et al., 2023). In line with previous research (Malloy & Kavussanu, 2021), we calculated the mean score of all items and used this score in the analysis. The same procedure was followed for the remaining of the scales reported below.

# Psychological safety

We used an adapted version of the psychological safety scale (Edmondson, 1996), to measure perceptions of psychological safety experienced within one's club. Participants rated their agreement to 7-items (e.g., "It is safe to take a risk in my club/team" and "Members of my club/team are able to bring up problems and tough issues") on a 7-point Likert-type scale anchored by 1 (*strongly disagree*) and 7 (*strongly agree*). The scale has shown good validity, model fit (Jowett et al., 2023) and internal consistency

(α range = .77 to .87; Gosai et al., 2023; Jowett et al., 2023) in athletic populations, with higher scores indicating greater psychological safety.

### Interpersonal violence

Participants completed a questionnaire that assessed their experiences of interpersonal violence in sport. The scale used by Vertommen et al. (2016) and the interpersonal violence cases identified by Fortier et al. (2020) were used as a basis to develop an initial scale. Each item was assessed for content validity by experts in the field and pilot tested with student-athletes (N = 64), who provided feedback on the relevance, clarity, and simplicity of each item. Test-retest reliability with a separate group of athletes (N = 78) completing the scale one-week apart indicated that all sub-scales reported good test-retest reliability (all r values > .90).

Participants were provided with the stem "In the last 12-months within the context of your current sports club, has anyone ever ... " followed by 20 items measuring physical (e.g., "hit or kicked you", "slapped or hit you with an open hand"), psychological (e.g., "threatened to hurt you", "sworn or cursed at you for not performing well"), and sexual (e.g., "made sexual comments about your body or looks", "intrusively stared at you in a sexual way") interpersonal violence, and neglect (e.g., "allowed you to train when they know you are injured or ill", "expected you to train or compete in unsafe conditions"). Participants responded on a 4-point scale how often they experienced each type of interpersonal violence (0 = never, 1 = once, 2 = a few times, 3 = regularly).

#### Well-beina

We measured well-being using the Subjective Vitality Scale (Ryan & Frederick, 1997). Participants were asked to think about how they feel when competing and training in their sport and respond to seven items (e.g., "I feel alive and vital" and "I have energy and spirit") on a 7-point Likert-type scale ranging from 1 (not at all true) to 7 (very true). Higher scores represent a greater sense of subjective vitality. The reliability and validity of the scale has been supported with the general population (Bostic et al., 2000; Ryan & Frederick, 1997) and by athletes from the United Kingdom (Reinboth et al., 2004), as well as very good internal consistency for use with athletes ( $\alpha = .84$  to .95; Liu et al., 2022; Rouquette et al., 2021).

#### **Procedure**

After obtaining ethical approval from the lead author's institutional ethical committee, participants were recruited via social media (e.g., Facebook, Instagram, X) between January and April 2023. They were sent a web address to an anonymous online survey on a Jisc platform, which stores data on an encrypted server within Amazon Web Services. Participants were first presented with an information sheet and were informed about the purpose of the study, that their information will be kept confidential and was anonymous, and that participation in the study was completely voluntary. They then provided informed consent before completing the measures described above and no restrictions were placed on time to complete the survey.



# **Data analysis**

Data were analysed using SPSS (version 29.0). First, they were screened for missing data, and these were replaced using multiple imputation (Royston, 2004). Cronbach's alphas and descriptive statistics were computed for authentic leadership, psychological safety and well-being and frequencies were calculated for interpersonal violence. We also computed correlation coefficients between all variables, and these were interpreted as small (.1), medium (.2), and large effect sizes (.3) (Gignac & Szodorai, 2016).

For our first and second study purpose, we used PROCESS v4.2 (Hayes, 2017) SPSS macro (model 5) to test direct and indirect (via psychological safety) effects of authentic leadership on well-being as well as whether interpersonal violence moderates the direct effect of authentic leadership on well-being. Direct effects are the effects of the predictor (i.e., authentic leadership) on the outcome (i.e., well-being) that occur separately from the mediator (i.e., psychological safety), while the indirect effect is the effect of the predictor on the outcome variable via the mediator. The completely standardised indirect effect (CSIE) was reported as the effect size, with magnitudes of 0.01, 0.09, and 0.25 indicating small, medium, and large effects, respectively.

With respect to examining whether the direct effect of authentic leadership on wellbeing was moderated by interpersonal violence, which we examined at the same time as mediation analysis using Model 5, we estimated the effects of authentic leadership (i.e., the predictor) on well-being (i.e., the outcome) at three different values of interpersonal violence (i.e., the moderator): the mean, 1 SD above the mean and 1 SD below the mean; mean-centring was used to help with the interpretation of the data (Hayes, 2012). Moderation would be evidenced if the direct effect of authentic leadership on well-being differs at different values of interpersonal violence. PROCESS uses Bootstrapping in the analysis (Hayes, 2009), which was set at 10,000 samples and bias-corrected 95% confidence intervals were calculated for all effects.

#### Results

# **Preliminary analysis**

Initial screening of the data revealed that three participants provided no responses, and were removed, leaving a final sample of 302. Little's missing completely at random test (Little, 1988) indicated that missing data were missing at random ( $\chi^2 = 929.16$ , df = 866, p = .067). Less than 5% of data were missing and these were replaced using multiple imputation. The multiple imputation model generated five data sets with the maximum parameters set at 100 and the mean of the five data sets was used to replace missing data.

# Reliability, descriptive statistics, and zero-order correlations

Cronbach's alphas, descriptive statistics and zero-order correlations for all measures are presented in Table 1. The measures showed good-to-excellent internal consistency. Participants perceived their coaches to display authentic leadership "fairly often" and reported moderate to high feelings of psychological safety and well-being. Frequency statistics for interpersonal violence scores indicated that 81.1% of participants

**Table 1.** Descriptive statistics, Cronbach's alphas and zero-order correlations between all variables (N = 302).

	Variable	M (SD)	α	1	2	3
1	Authentic leadership	2.88 (0.72)	.94			
2	Psychological safety	5.20 (1.02)	.72	.43**		
3	Interpersonal violence	0.68 (0.60)	.90	<b>17*</b>	33**	
4	Well-being	4.97 (1.18)	.88	.27*	.37**	13**

Note: SD = standard deviation,  $\alpha$  = Cronbach's alpha. Possible range of scores: authentic leadership = 0-4; psychological safety and well-being = 1-7; interpersonal violence = 0-3.

experienced some form of interpersonal violence in the last 12 months. Over half experienced interpersonal violence once (56.9%), less than half a few times (41.4%), and just over a quarter (28.5%) reported experiencing interpersonal violence regularly. As shown in Table 1, authentic leadership was positively associated with both psychological safety and well-being and inversely linked to interpersonal violence. Well-being was also positively related to psychological safety and inversely linked to interpersonal violence.

### Main analyses

Our first study purpose was to examine whether psychological safety mediates the relationship between authentic leadership and well-being. As can be seen in Table 2, authentic leadership was positively related to psychological safety, which in turn was positively related to well-being. Importantly, authentic leadership was indirectly related to well-being via psychological safety (b = 0.22, 95% CI = 0.12–0.31, p < .05), thus providing evidence for mediation; this effect was moderate in size (CSIE = 0.13, 95% CI = 0.07–0.19). Mediation was partial, given that the direct effect of authentic leadership on well-being remained significant.

Our second study purpose was to examine whether the direct effect of authentic leadership on well-being was moderated by interpersonal violence (i.e., if there was an interaction effect). The interaction between authentic leadership and interpersonal violence was significant (see Table 2), with conditional effects indicating that authentic leadership had a positive effect on well-being when interpersonal violence was low or moderate, but it had no effect on well-being when interpersonal violence was high. These findings can be seen in Table 3 and Figure 2. The model accounted for 16% of variance in well-being (R = .41,  $F_{(4, .297)} = 14.58$ , p < .001).

**Table 2.** Results of mediation and moderation analysis.

		95% CI			
Predictor	b (SE)	Lower Level	Upper Level	р	
	Psychological safety				
Authentic leadership	0.61 (0.07)	0.46	0.76	<.01	
·		Well-being			
Authentic leadership	0.26 (0.10)	0.07	0.45	.01	
Psychological safety	0.35 (0.07)	0.21	0.49	<.01	
Interpersonal violence	0.01 (0.11)	-0.21	0.22	.96	
Authentic leadership × Interpersonal violence	-0.30 (0.13)	-0.56	-0.03	.03	

Note. Authentic leadership and interpersonal violence were mean-centred prior to analysis; unstandardised coefficients are reported. SE = standard error, 95% CI = 95% confidence interval.

<sup>\*</sup> *p* < .05; \*\* *p* < .01.

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**Table 3.** Conditional effects of authentic leadership on well-being at three values of interpersonal violence.

		95%	6 CI	
Interpersonal violence score	ь	Upper	Lower	р
-1SD = -0.60 (0.07)	0.44	0.17	0.71	<.01
Mean = 0.00 (0.68)	0.26	0.07	0.45	.01
+ 1SD = 0.60 (1.28)	0.08	-0.15	0.31	.50

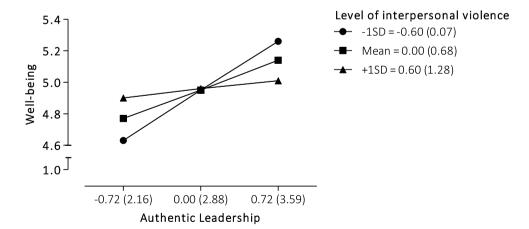
Note: Interpersonal violence scores were mean centred, which appear alongside the raw values in paratheses. 95% CI = 95% confidence intervals.

#### **Discussion**

Identifying the leadership styles that promote athletes' well-being is an important area of research that has received increased attention in recent years (Jowett et al., 2023; Vella et al., 2024; Walton et al., 2024). This is of particular importance given the high prevalence of interpersonal violence reported by athletes (Hartill et al., 2023; Vertommen et al., 2016; Willson et al., 2023), which could influence their well-being. Although researchers have examined relationships of authentic leadership and athlete psychological and mental well-being (Kavussanu et al., 2024), no research has investigated the relationship between authentic leadership and subjective vitality as an indicator of well-being, the mechanism through which this relationship operates, and whether interpersonal violence moderates this relationship. In this study, we filled this gap in the literature.

# The mediating role of psychological safety

Authentic leadership was indirectly related to well-being via psychological safety. Thus, athletes who perceived that their coach engaged in authentic leadership behaviours, such as being open and honest and expressing their true thoughts and feelings in their interactions with athletes, were more likely to feel psychologically safe, and in turn, experience a higher sense of well-being as indicated by higher scores on the subjective



**Figure 2.** Moderation of the direct effect of authentic leadership on well-being. Note: Values for authentic leadership and interpersonal violence were mean-centred and represent the mean, and one SD below and above the mean. Raw values are reported in parentheses. Possible range scores for authentic leadership = 0 to 4; well-being: 1 to 7; interpersonal violence = 0 to 3.

vitality scale. Some have shown that when athletes perceive their coach to be an authentic leader, they also experience greater enjoyment, and mental and psychological well-being (Bandura & Kavussanu, 2018; Kavussanu et al., 2024; Kim et al., 2020). Taken together, our findings highlight the role of authentic leadership in promoting psychological safety and the importance of psychological safety in promoting athlete well-being.

Psychological safety is often reported in organisational research as a characteristic whereby people feel confident in asking for help, speak openly, and challenge ideas without fear of reprise, and this construct has been positively related to well-being (Edmondson, 1999; Edmondson & Lei, 2014). Recently, Vella et al. (2024) developed a theoretical model of psychological safety, proposing that leadership style is important for creating psychologically safe environments, which in turn are assumed to lead to enhanced athlete well-being. We provide support for this aspect of the model, by showing a positive relationship between authentic leadership and well-being via psychological safety. Authentic leadership from coaches is therefore an important factor which could promote psychological safety in the environment where athletes compete and train, and this in turn can positively affect their well-being.

# The moderating role of interpersonal violence

We found that the direct relationship between authentic leadership and well-being was moderated by previous experiences of interpersonal violence within one's sport club. That is, while authentic leadership was positively related to well-being, this link was attenuated when athletes had experienced higher levels of interpersonal violence. Thus, although authentic leadership may promote athlete well-being, this may only occur when athletes have fewer experiences of interpersonal violence in the previous 12 months. As a large body of research has reported high incidents of athlete interpersonal violence (Hartill et al., 2023; Lang et al., 2023; Willson et al., 2023), our finding further indicates that interpersonal violence can offset the beneficial effects of leadership style on athlete well-being.

With the growing body of research examining interpersonal violence (Fortier et al., 2020; Parent et al., 2022; Willson et al., 2023) and what may promote athlete well-being, such as leadership styles (Kavussanu et al., 2024; Kim et al., 2020) our findings further underscore the need to measure variables that may change the strength of relationships. Interpersonal violence is omnipresent in sport and experiencing it frequently may have detrimental effects on the positive impact of authentic leadership on athlete well-being. While we showed that authentic leadership had a unique effect on athlete well-being beyond that explained by psychological safety, the direct effect of authentic leadership on well-being was only shown in those athletes experiencing low or moderate levels of interpersonal violence. This highlights the significant detrimental effect interpersonal violence may have on athlete well-being, which can attenuate the beneficial effects of coach leadership. Our results, further emphasise the need to implement and develop interventions and policy that prevent athletes from experiencing interpersonal violence in sport.

#### **Practical implications**

The results of our study have important implications for helping coaches develop and maintain their athletes' well-being. Coaches are encouraged to reflect on their leadership style to understand how they react to their athletes after instruction and when disagreements may occur. Importantly, coaches should reflect on their motivations and goals for working with their athlete and whether these are underpinned by their own needs or those of the athlete. For example, coaches should consider whether the motivations for a training programme are to help the coach achieve their goal, such as winning a competition, or to help the athlete achieve their goal. Such reflections should also be considered alongside open communication between the athlete and coach on what the athlete aims to achieve in their sporting career.

While authentic leadership was shown to be directly and indirectly (via psychological safety) related to well-being, experiencing interpersonal violence can affect the strength of this relationship. As such, a need exists to prevent interpersonal violence from occurring in sport contexts that an athlete trains, competes and socialises. As sport clubs that normalise and tolerate interpersonal violence are more likely to affect athlete well-being (Jessiman-Perreault & Godley, 2016; Papathomas et al., 2025; Stirling & Kerr, 2008), interventions that help those in their club create a culture that condemns such behaviours and encourage bystanders to speak out when they experience interpersonal violence are needed. Educating those in a position of power (e.g., coaches, managers, directors) about the consequences of interpersonal violence and raising awareness of the implications of their actions on the well-being of their athletes is important. In short, it is fundamental that sport leaders behave in ways that do not cause harm to their athletes.

#### Limitations and directions for future research

While the results of our study revealed novel and important findings, these should be interpreted in light of the following limitations. First, the retrospective nature of the interpersonal violence in sport scale may also be subject to recall bias, which could influence the accuracy of participant responses. Second, data were collected at one point in time and are limited by the cross-sectional research design, whereby cause and effect cannot be established. Longitudinal research should be used to provide a stronger understanding of the relationships between authentic leadership, psychological safety, interpersonal violence and well-being. Third, we examined experiences of interpersonal violence without specifying a perpetrator. To help provide a greater understanding of the effects of interpersonal violence on the relationship between authentic leadership and athletes' well-being, future research should examine if the coach is the perpetrator of interpersonal violence by referring explicitly to them during assessment.

#### Conclusion

In this study, we are the first to show that authentic leadership is directly and indirectly (via psychological safety) related to well-being in sport. This suggests that athletes who perceive their coach to be an authentic leader are more likely to have a greater sense of well-being while competing in sport through experiencing greater psychological safety within their team. This highlights the need for sport organisations to encourage coaches to display authentic leadership behaviours, such as honesty and transparency. To further maintain and support athlete well-being, coaches should create environments whereby athletes feel comfortable in communicating and can seek feedback, advice, or



help without reprise. However, given that interpersonal violence may attenuate the beneficial effects of authentic leadership on athlete well-being via psychological safety, a need exists in developing and implementing effective prevention strategies that can protect and safeguard athletes from abuse and harassment in sport.

#### Note

1. Unless otherwise stated, we use the term "well-being" to refer to subjective vitality.

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No potential conflict of interest was reported by the author(s).

# **Data availability**

Data will be made available upon the request from the corresponding author.

#### **ORCID**

Philip Hurst http://orcid.org/0000-0002-9265-2975 *Maria Kavussanu* http://orcid.org/0000-0003-1748-5262

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